

For each situation below, determine whether the sample would be a random, unbiased sample. Then, explain your reasoning.

Survey Topic	Population	Sample	Good or Bad Sample?	WHY is this sample Good or Bad?
What is the median income of people in the City of Mathville?	City of Mathville	Shoppers at a luxury car dealer		
What is the average math grade of students at my school?	My school	20 students from each grade level, selected by drawing names from a hat		
How fast is the typical 20- year-old American male?	All 20-year-old American males	20-year-old Olympic track runners		
How many hours of YouTube videos do teenagers watch per year in the US?	All American teenagers	Volunteers who answer a survey that pops up after a YouTube video		
How many bananas does the typical chimp in a zoo eat per week?	All chimps who live in zoos	Chimps from 5 major zoos		

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Why is it important to make sure a sample is random and unbiased?